| In | dex      | of | Cla | ims   |
|----|----------|----|-----|-------|
|    | <b>u</b> | •  | 0,0 | ,,,,, |



Application/Control No.

10/589,348

Examiner

Viji N. Bernard

Applicant(s)/Patent under Reexamination

SHIMIZU ET AL.

Art Unit

1792

| √  | Rejected |
|----|----------|
| II | Allowed  |

- (Through numeral)
Cancelled

Restricted

N Non-Elected
I Interference

A Appeal
O Objected

|          |   |          |          |            |                |          | J        |              | L        |                 |  |
|----------|---|----------|----------|------------|----------------|----------|----------|--------------|----------|-----------------|--|
| Oto See  |   | Data     |          |            |                |          |          |              |          |                 |  |
| Claim    |   |          | _        | _          |                | Date     | <u> </u> | _            | r -      | Н               |  |
| _        | <u>7</u>  | <u>ω</u> |          |            |                |          |          |              |          |                 |  |
| Final    | Original  | 1/12/08  |          |            |                |          |          |              |          |                 |  |
| i E      | 2   | =        |          |            |                |          |          |              |          |                 |  |
| <u></u>  |   |          |          | _          |                |          |          |              |          | Ш               |  |
|          | 1   | 1        | _        | _          | L              |          |          |              |          | Ш               |  |
|          | 2   | 1        | <u> </u> |            |                |          |          |              |          | Ш               |  |
|          | 3   | 7 7 7    | _        | _          | _              |          | <u> </u> | _            | _        | Ш               |  |
|          | 4   | V        |          |            | _              | <u> </u> | _        | _            | <u> </u> |                 |  |
|          | 5   |          |          |            | _              | _        |          |              | <u> </u> | Щ               |  |
|          | 6   |          | _        |            | _              | _        | _        | L            |          | Щ               |  |
|          | 7   |          | ļ        | <u> </u>   | _              | <u> </u> |          |              |          | Щ               |  |
|          | 8   |          | _        | _          | <u> </u>       | <u> </u> | <u> </u> | <u> </u>     | <u> </u> | Ш               |  |
| <u> </u> | 9_  |          |          | _          |                |          |          |              | <u> </u> | Ш               |  |
| <u> </u> | 10  |          |          | <u> </u>   | <u> </u>       |          | <u> </u> |              | _        | Ш               |  |
|          | 11  |          | <u> </u> | <u> </u>   | <del>  -</del> | _        | <b> </b> | <u> </u>     | <u> </u> | $\vdash \vdash$ |  |
|          | 12  | <u> </u> | <u> </u> |            |                |          | <b>-</b> | <del> </del> | <u> </u> | Ш               |  |
| <u> </u> | 13  | $\vdash$ | $\vdash$ | <u> </u>   | $\vdash$       | <u> </u> | <u> </u> | $\vdash$     | <u> </u> | $\sqcup$        |  |
| <u> </u> | 14  | <u> </u> | $\vdash$ | <u> — </u> | ⊢              | <u> </u> | <u> </u> | <u> </u>     | <u> </u> | Ш               |  |
| <u> </u> | 15  | $\vdash$ | $\vdash$ | <u> </u>   | $\vdash$       | <u> </u> | <u> </u> | $\vdash$     | <u> </u> | Ш               |  |
| <u></u>  | 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21 | $\vdash$ | $\vdash$ | $\vdash$   | $\vdash$       | <u> </u> | <u> </u> | <u> </u>     | <u> </u> | $\vdash$        |  |
| <u> </u> | 17  |          |          | <u> </u>   | L              | <u> </u> | <u> </u> |              | <u> </u> | Н               |  |
|          | 18  | _        | $\vdash$ | <u> </u>   | _              | _        | $\vdash$ |              | <u> </u> | Н               |  |
| <u> </u> | 19  | _        | <u> </u> | _          | _              | <u> </u> |          | -            | <u> </u> |                 |  |
|          | 20  |          |          |            |                | <u> </u> |          |              | <u> </u> | Н               |  |
|          | 21  |          |          | _          |                | ┝        |          | H            | <u> </u> | Н               |  |
|          | 22  | _        | _        | _          | _              | <u> </u> | $\vdash$ | -            | _        | Н               |  |
|          | 22<br>23<br>24<br>25  |          |          |            |                | ┝        |          | ┝            | _        | Н               |  |
|          | 25  |          | -        |            |                | ┝        |          | H            |          | $\vdash$        |  |
|          | 26  |          |          |            |                | $\vdash$ | _        | $\vdash$     | ⊢        | Н               |  |
|          | 26<br>27<br>28<br>29  |          |          | _          | -              | _        | _        | -            | $\vdash$ | Н               |  |
|          | 28  | —        |          | -          | -              | —        | —        |              | _        | $\vdash$        |  |
| <u></u>  | 20  |          | _        |            | -              | -        |          |              |          | Н               |  |
|          | 30  |          |          |            | -              |          | _        |              | $\vdash$ |                 |  |
|          | 31  |          | -        |            | ┢─             | _        |          |              |          | Н               |  |
| $\vdash$ | 32  | _        |          | _          | -              | _        |          | -            | -        | Н               |  |
|          | 31<br>32<br>33  |          |          |            | ┢              | _        |          |              | H        | Н               |  |
|          | 34  |          |          | <u> </u>   | $\vdash$       |          |          |              | $\vdash$ |                 |  |
|          | 34<br>35  |          |          |            | $\vdash$       | _        |          |              |          | Н               |  |
|          | 36  |          |          |            | Т              |          |          | ┢┈           |          | H               |  |
|          | 37  |          |          | $\vdash$   | $\vdash$       |          |          |              | _        | Н               |  |
|          | 38  |          |          | $\vdash$   | Ι              | Ι        | 一        | -            |          | $\vdash \vdash$ |  |
|          | 39  |          | $\Box$   | $\vdash$   | Г              | $\vdash$ |          |              |          | М               |  |
|          | 40  |          |          |            | l              |          |          | _            | $\vdash$ | H               |  |
|          | 41  |          |          |            | Г              |          | Т        |              |          | Н               |  |
|          | 42  | П        | П        |            |                |          |          |              |          | М               |  |
|          | 43  |          |          |            |                |          |          |              |          | П               |  |
|          | 44  |          |          |            |                |          |          |              |          | П               |  |
|          | 45  |          |          |            |                |          |          |              |          | П               |  |
|          | 46  |          |          |            |                | _        |          |              |          | П               |  |
|          | 47  |          |          |            |                |          |          |              |          |                 |  |
|          | 48  |          |          |            |                |          |          |              |          |                 |  |
|          | 49  |          |          |            |                |          |          |              |          |                 |  |
|          | 50  |          |          |            |                |          |          |              |          |                 |  |

| Cla      | aim  | · ·      | _                                   |  | _       | Date   |              |          |          |               |
|----------|--|----------|-------------------------------------|--|---------|--|--------------|----------|----------|---------------|
|          |  |          | П                                   | Γ  | m       | m  |              | Г        | Г        | Γ             |
| Final    | Original   |          |                                     |  |         |  |              |          |          |               |
|          | 51   |          |                                     |  |         |  |              |          |          |               |
|          | 52<br>53   |          |                                     |  |         |  |              |          |          |               |
|          | 53   |          |                                     |  |         |  |              |          |          |               |
|          | 54<br>55   |          |                                     | $ldsymbol{ld}}}}}}$ |         | L  | _            |          |          |               |
|          | 55   |          |                                     |  | L.,     |  |              | L        |          |               |
|          | 56   | L        | _                                   | $oxed{oxed}$   | _       | L  |              | _        |          |               |
|          | 57   |          | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ |  |         | L  | L            |          | _        |               |
|          | 58   | _        | <u> </u>                            | _  |         | _  | <u> </u>     | _        | _        | _             |
| ļ        | 59   | <u> </u> | _                                   |  |         | _  | <u> </u>     |          | _        | _             |
| <b>├</b> | 60<br>61   | $\vdash$ | $\vdash$                            | $\vdash$   | -       |  | _            | -        | -        |               |
| $\vdash$ | 62   | -        | <u> </u>                            | -  | -       | -  | <u> </u>     | $\vdash$ | -        |               |
| -        | 63   | -        | $\vdash$                            | -  |         |  | H            | H        | -        |               |
|          | 64   | -        | $\vdash$                            |  | -       | $\vdash$   | -            |          | -        |               |
| $\vdash$ | 63<br>64<br>65                                     | $\vdash$ | $\vdash$                            | $\vdash$   | -       | -  | -            | -        |          |               |
| <b>-</b> | 66   |          | H                                   |  | _       | -  | _            | _        | -        |               |
|          | 66<br>67   |          | Г                                   |  |         |  |              |          |          |               |
|          | 68   |          | Г                                   | П  |         |  | _            |          | <b></b>  |               |
|          | 69   |          |                                     | Г  |         |  | _            |          | _        |               |
|          | 70   |          |                                     |  |         | Г  |              |          | Г        |               |
|          | 71   |          |                                     |  |         |  |              |          |          |               |
|          | 72   |          |                                     |  |         |  |              |          |          |               |
|          | 68<br>69<br>70<br>71<br>72<br>73<br>74<br>75<br>76 |          |                                     |  |         |  |              |          |          |               |
|          | 74   |          |                                     |  |         |  |              |          |          |               |
| ļ        | 75   | _        |                                     |  |         |  |              | _        | <u> </u> |               |
|          | 76   |          |                                     | L  |         | ļ  |              | L.,      | _        |               |
|          | 77   |          | _                                   | L  | _       | <u> </u>   |              | H        | <u> </u> | _             |
|          | 77<br>78<br>79                                     |          | _                                   | <u> </u>   |         | _  |              | _        | -        |               |
|          | 80   |          |                                     | -  | -       | -  |              |          | ┝        |               |
|          | 81   |          |                                     | ├  |         | -  | -            | $\vdash$ | ⊢        |               |
| -        | 82   | _        | H                                   | ├  | _       | $\vdash$   |              |          | ┝        | _             |
|          | 82<br>83   |          |                                     | $\vdash$   | _       | <del> </del>                                     |              | $\vdash$ | $\vdash$ | _             |
| -        | 84   |          | П                                   |  |         | Н  |              | Н        | Н        |               |
|          | 85   |          |                                     |  |         |  |              | П        | Г        |               |
|          | 86   |          |                                     |  |         |  |              |          |          |               |
|          | 87   |          |                                     |  |         |  |              |          |          |               |
|          | 88   |          |                                     |  |         |  |              |          | 匚        |               |
| <u></u>  | 89   | L        |                                     |  |         |  |              |          | L        |               |
| <u></u>  | 90   | Щ        | Щ                                   | Ш  |         | $oxed{oxed}$                                     |              | $\sqcup$ | L        |               |
| <u></u>  | 91   | L        | <u> </u>                            | <u> </u>   | <b></b> |  | H            |          | <u> </u> | _             |
| <b> </b> | 92   | $\vdash$ | Ш                                   | $\vdash$   | H       | <u> </u>   | <u> </u>     | H        | $\vdash$ | _             |
| <u> </u> | 93<br>94   | $\vdash$ | $\vdash$                            | -  |         |  | <u> </u>     | H        | ⊢        | -             |
| -        | 95   | $\vdash$ |                                     | -  | -       | <del>                                     </del> | <u> </u>     | $\vdash$ | $\vdash$ |               |
| -        | 96   | $\vdash$ | $\vdash$                            | $\vdash$   | H       | $\vdash$   | $\vdash$     | $\vdash$ | ┝        |               |
| $\vdash$ | 97   | $\vdash$ | $\vdash$                            | $\vdash$   |         | $\vdash$   | <del> </del> | $\vdash$ | $\vdash$ | $\vdash$      |
| <b>—</b> | 98   | $\vdash$ | $\vdash$                            | H  | H       | H  | H            | $\vdash$ |          | <del> -</del> |
| -        | 99   |          | Н                                   | $\vdash$   |         |  | Н            | Т        | -        | -             |
|          | 100  |          | Г                                   | $\vdash$   |         | -  | $\vdash$     | Г        |          | _             |

| Claim    |   | Date               |                |                |          |          |          |              |                |  |  |
|----------|---|--------------------|----------------|----------------|----------|----------|----------|--------------|----------------|--|--|
| Final    | Original  |                    |                |                |          |          |          |              |                |  |  |
|          | ļ   | <u> </u>           | <u> </u>       |                |          | _        |          |              |                | $\vdash$   |  |
|          | 102   | _                  |                |                |          |          |          |              |                | $\dashv$   |  |
|          | 103   | $\overline{}$      |                |                |          |          |          |              |                | $\neg$   |  |
|          | 104   |                    |                |                |          |          |          |              |                |  |  |
|          | 101<br>102<br>103<br>104<br>105                             |                    |                |                |          |          |          |              |                |  |  |
|          | 106   | L                  |                |                |          |          |          |              |                |  |  |
| -        | 107   | _                  |                |                |          | _        |          |              |                |  |  |
|          | 108<br>109  | _                  | <u> </u>       | <u> </u>       |          |          |          |              |                |  |  |
| -        | 109   | <u> </u>           |                |                |          |          | <u> </u> | L            | <u> </u>       | $\dashv$   |  |
|          | 110<br>111  | _                  | -              | -              |          |          | -        | <u> </u>     | -              | -  |  |
|          | 112   | -                  | -              | <del> </del>   |          | _        |          | $\vdash$     | -              | $\vdash$   |  |
| <u> </u> | 112   | $\vdash$           | ⊢              |                |          | -        | -        |              | -              | $\dashv$   |  |
|          | 114   | $\vdash$           |                |                |          |          | $\vdash$ | H            |                | $\dashv$   |  |
|          | 115   | $\vdash$           | $\vdash$       | $\vdash$       |          | $\vdash$ | Н        | $\vdash$     | $\vdash$       | Н  |  |
| -        | 116   |                    | Т              | F              |          | П        | Т        | Г            |                | $\Box$   |  |
|          | 112<br>113<br>114<br>115<br>116<br>117                      |                    |                |                |          |          |          |              | ·              |  |  |
|          | 118   |                    |                |                |          |          |          |              |                |  |  |
|          | 118<br>119<br>120<br>121                                    |                    |                |                |          |          |          |              |                |  |  |
|          | 120   |                    |                |                |          |          |          |              |                |  |  |
|          | 121   |                    |                |                |          |          |          |              |                |  |  |
|          | 122   | _                  |                | _              |          |          |          |              | $\vdash$       | _  |  |
| <u> </u> | 123   | <u> </u>           | <u> </u>       | -              |          |          |          | _            | _              | $\dashv$   |  |
| <u></u>  | 124   |                    | <u> </u>       | _              |          | _        | _        | <u> </u>     |                |  |  |
|          | 125   | ⊢                  | <u> </u>       | -              |          |          |          | _            |                | Н  |  |
|          | 127   | ┢                  | ┢              | -              |          |          | $\vdash$ |              | $\vdash$       | $\vdash$   |  |
| $\vdash$ | 122<br>123<br>124<br>125<br>126<br>127<br>128<br>129<br>130 | $\vdash$           | _              |                |          | -        |          | Н            |                | $\dashv$   |  |
|          | 129   |                    |                |                | _        |          |          |              |                |  |  |
|          | 130   |                    |                |                |          |          |          |              |                |  |  |
|          | 131   |                    |                |                |          |          |          |              |                |  |  |
|          | 132   |                    |                |                |          |          |          |              |                |  |  |
| <u></u>  | 133<br>134<br>135   | <u> </u>           | <u> </u>       | _              | _        |          | _        | <u> </u>     | _              | $\square$  |  |
|          | 134   | <u> </u>           | <u> </u>       |                |          |          | _        | <u> </u>     | <u> </u>       |  |  |
|          | 135   | -                  | $\vdash$       | H              |          | $\vdash$ | _        | _            | H              | Н  |  |
| <u> </u> | 136<br>137  | $\vdash$           | ┝              | $\vdash$       | _        |          |          | $\vdash$     | $\vdash$       | $\vdash\vdash$                                   |  |
|          | 138   | $\vdash$           | $\vdash$       |                |          | $\vdash$ | $\vdash$ |              | H              | $\vdash$   |  |
|          | 138<br>139  | $\vdash$           | 一              |                |          | Н        |          | ┢            | _              | $\vdash$   |  |
|          | 140   |                    | 一              |                |          |          |          | $\vdash$     |                |  |  |
| -        | 141   |                    |                | Г              |          |          |          |              |                |  |  |
|          | 142   |                    |                |                |          |          |          |              |                |  |  |
|          | 143   |                    |                |                |          |          |          |              |                |  |  |
|          | 144   | $oxedsymbol{oxed}$ | L              |                |          |          | L        | L_           | _              | Ш  |  |
|          | 145   | <u> </u>           | L              | <u> </u>       |          | _        | _        | <u> </u>     |                | $\vdash \vdash$                                  |  |
|          | 146   | <u> </u>           | <del>  -</del> | <del> </del>   | _        | <u> </u> | _        | <del> </del> | <u> </u>       | Н  |  |
|          | 147   |                    | -              | <del> </del> — | _        |          | _        |              | <u> </u>       | <del>                                     </del> |  |
|          | 148<br>149  |                    | -              | ⊢              | <u> </u> | -        | <u> </u> | $\vdash$     |                |  |  |
|          | 150   | $\vdash$           | -              | $\vdash$       |          | -        | _        | ┝            | <del>  -</del> | $\vdash$   |  |
|          | 100   | <u> </u>           |                |                |          | Ц_       | Щ.       | Ц            | Ļ              | ш  |  |